

GENCIC, M.; STEFANOVIC, B.; MICANOVIC, V.

Apropos of 3 cases of omental torsion. Acta chir. Jugosl. 12 no.1:
42-47 '65.

1. I hirurska klinika Medicinskog fakulteta u Beogradu (Upravnik
prof. dr. I.J. Rasovic).

GENCIC, Vladimir
SURNAME (in caps); Given Name

Country: Yugoslavia

Academic Degrees: Ing.

Affiliation: [not given]

Sources: Belgrade, Vostok, No 4, 1960, pp 90-91.

Data: "The XI Congress of the International Astronautic Federation."

43

L 58822-65

ACCESSION NR: AR5000583

S/0271/64/000/CO9/BO57/BO58
681.142:62

4
B

SOURCE: Ref. zh. Avtomat., telemekh. i vychisl. tekhn. Sv. t., Abs. 9B341

AUTHOR: Lyubimov, E. V.; Genchikmakher, A. G.; Semenovych, V. F.

TITLE: Physical and mathematical simulation of an MI-set-motor-drive system with a dynamoelectric amplifier under the dynamic starting and stopping conditions

CITED SOURCE: Sb. dokl. Konferentsii po primeneniyu vychisl. tekhn. i sredstv avtomatiki. Perm', 1963, 39-48

TOPIC TAGS: MI set motor drive, dynamoelectric amplifier, motor starting simulation, motor stopping simulation

TRANSLATION: The method of mathematical simulation of electrical-machine automatic systems provides a rather complete picture of starting and stopping transients. In simulating the MI-set-motor-drive system (MOS) with a dynamoelectric amplifier (DEA) the parameters of an automatic control system were determined and used for setting up the equations describing transient phenomena. A scheme is presented of physical model which yields an excavator characteristic; it has generator-voltage and cutoff-system armature-current negative feedbacks; it also has a DEA-voltage correcting circuit. Oscillograms of starting and stopping transients in the system

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ACCESSION NR: AR5000583

are shown. The mathematical simulation was performed with the following assumptions: the armature reaction in the DEA and the generator is nil; the DEA and the generator operate under unsaturated conditions; no inductance in the MOS armature circuit; leakage fluxes in all units are neglected; the flexibility of the entire actuating mechanism is concentrated in the rope. The equations describing the system dynamics under the above assumptions are presented, as is a structural diagram based on these equations. This structural diagram was used for setting up a mathematical simulator on an MN-7 outfit. Parameters and unit models are given; also the scales of variables and transfer ratios of computing amplifiers are given. The curves of speed and armature-circuit current during starting and stopping are shown. Comparison of these curves with the oscillograms taken from the real physical model shows that the model does reproduce the nature of starting transients; the current curves diverge in the amount of overshooting and in the period of oscillation; the regulation time in starting the physical and the mathematical models is the same. The agreement between the stopping-transient curves is satisfactory. The curves obtained from the model have almost the same period and damping decrement as the real curves. They diverge in the amplitude of oscillations: the speed oscillations generated by the model have a greater amplitude than that determined from the real curve, while the current curve is higher in its steady-state value. The model reproduces the process with an inferior performance as compared to the

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L 53822-65

ACCESSION QR: AR5000583

system. Six illustrations. Bibliography: 7 titles.

SUB CODE: EE

ENCL: 00

dm
Card 3/3

PALFALVI, Lajos; GENCSI, Pal. formerok

The 1961 innovation plan of the Investment Enterprise of Power Plants.
Gepgyartastechn 1 no.3:108-109 Je '61.

1. Eromu Beruhazasi Vallalat igazgatoja (for Palfalvi). 2. Eromu Beruhazasi Vallalat (for Gencsi).

GENCSI, Pal, formernok; SOVARY, Emil, dr., formernok

Supplement to the 1964 innovation plan of the Power Plant
Investment Enterprise. Ipari energia 5 no.7:161 J1 '64

1. Power Plant Investment Enterprise, Budapest (for Gencsi).
2. Power Plant and Network Designing Enterprise, Budapest, V.,
Szechenyi rakpart 3 (for Sovary).

HALASI, Zoltan; GENCSI, Pal, fomernok

Innovation plan of the Power Plant Investment Enterprise for the year 1965. Ipari energia 6 no.3:71-72 Mr '65.

1. Power Plant Investment Enterprise, Budapest. 2. Director, Power Plant Investment Enterprise, Budapest (for Halasi).

GENONI, Lazzio, egysomi adjunktus (leptona)

Periodicity in the development of the individuality of the
Scotch fir. Endo 14 no.4:182-176 Ap '65.

HAIASI, Zoltan; GENCSEI, Pal, fomernok

The 1964 innovation plans of the Power Plant Investment Enterprise. Ipari energia 5 no.1:16-17 Ja '64.

1. Power Plant Investment Enterprise, Budapest.
2. Director, Power Plant Investment Enterprise, Budapest (for Halasi).

HALASI, Zoltan; GENCSI, Pal, formernok

The 1964 innovation plans for the Investment Enterprise of Power Plants. Energia es atom 17 no.3:144-145 Mr '64.

1. Director, Power Plant Investment Enterprise, Budapest (for Halasi). 2. Power Plant Investment Enterprise, Budapest (for Gencsi).

MILOV, A., inzhener; GENDEL', A., redaktor; STEPANOVA, N., tekhnicheskiy redaktor

[On the road to growth; practices of the casting shop of the Kirov Machine Building Plant in Minsk] Po puti rosta; iz opyta raboty liteinogo tsekha Minskogo stankostroitel'nogo zavoda im. Kirova. Minsk, Gos. izd-vo BSSR, 1956. 25 p. (MLRA 10:1)
(Founding)

GENDEL', E., kand. tekhn. nauk

Deformation of constructions caused by the breaking of the
ground structure. Sbor. nauch. soob. NIIsel'stroia no.2:
88-91 '60.

(MIRA 15:5)

(Foundations)

GENDEL', E. M.

The moving of buildings Moskva, Izd-vo Narkomkhoza RSFSR, 1946. 175 p. (50-19894)

TH153.G4

GENDEL', E. M.

FA 64/49T45

USDA/Engineering
Construction Methods
Bridges

Jul 48

"The Hoisting and Transporting of a Bridge Footing
Across a River," E. M. Gendel', Cand Tech Sci, 1 P

"Stroitel Prom" No 7

Reveals rapid hoisting and transporting of a
bridge footing after a German invasion. Hydraulic
operations were performed within a few hours by
15 trust workers by hydraulic means. Gives
dimensions and two diagrams of bridge footing.

64/49T45

GEMDEL', B.M., kand.tekhn.nauk

Using machinery in making pneumatic pilen. Stroi.prom. 27
no.7:10-13 J1 '49. (MIRA 13:2)
(Piling (Civil engineering))

GENDEL', E., kand.tekhn.nauk

Foundations for the arches of livestock buildings. Sel'. stroi. 15
no. 2:26-27 F '61. (MIRA 14:5)
(Reinforced concrete construction) (Barns) (Arches)

GHENDEL', M.M., kandidat tekhnicheskikh nauk.

Valerian Ivanovich Kirdiumov; one hundredth anniversary of his birth.

Stroi.prom.31 no.12:41-42 D '53.

(MLBA 7:1)

(Kirdiumov, Valerian Ivanovich, 1853--)

GENDEL', N.M.

~~GENDEL'~~ N.M., kandidat tekhnicheskikh nauk; LAVRINOVICH, A.A., inzhener; KOPYLOV, N.A., inzhener.

Over-all mechanization of loading and unloading in conveying brick and slag concrete brick. Stroi.prom. 32 no.7:42-44 J1 '54.
(MLRA 7:7)

(Bricks--Transportation) (Loading and unloading)

CHENDEL', Esmail Matveyevich, kand. tekhn.nauk,; IOLOVICH, D.S., inzh.,
nauchnyy redaktor,; SKVORTSOVA, I.P., red. izd-va,; EL'KINA,
E.M., tekhn. red.

[Reconditioning and erecting of structures by means of lifting]
Vosstanovlenie i vosvedenie sooruzhenii sposobom pod'ema. Moskva,
Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam,
1958. 279 p. (MIRA 11:12)

(Building)

GENDEL', E.M., kand.tekhn.nauk

~~SECRET~~

A method of preventing the irregular settling of buildings in
mining operation areas. *Shakht.stroi.* no.10:14-17 '58.
(Mine buildings) (MIRA 11:11)

GENDEL', B.M., kand. tekhn. nauk.

Adding supplementary stories by lifting. Stroi. prom. 36 no.1:6-10
Ja '58. (MIRA 11:1)

(Apartment houses) (Lifting--Jacks)

GENDREL', N.H.

Methods for leveling marked irregular settlements of structures.
Osn., fund. i mekh. grun. no.3:28 '59. (MIRA 12:8)
(Foundations) (Frozen ground)

GENDEL', E., kand.tekhn.nauk

~~Foundations of a new design. Sel'.stoi. 14~~ no.6:26 Je '59.
(MIRA 12:9)

(Foundations)

GENDEL', M., kand.tekhn.nauk

Designs of masonry foundations for wooden buildings. Sel'.
stroil. 14 no.10:22 0 '59. (MIRA 13:2)
(Foundations)

GENDEL', R.M.

Efficient designs of foundations for rural masonry buildings.
Osn., fund.i melh.grun. 2 no.1:2-4 '60. (MIRA 13:5)
(Foundations)

GENDEL', E., kand.tekhn.nauk

Efficient foundations for buildings of few stories. Sel'. stroi.
15 no.12:26 D '60. (MIRA 13:12)
(Foundations)

GENDEL', E.M., SHEVELEV, A.P.

Specific cost of foundations in relation to the number of objects
and the distance of the transportation of building materials.
Osn. fund. 1 mekh. grun. 6 no. 4:22-23 '64. (MIRA 10.12)

GENDEL, K.K.

BARANOVSKIY, V.I.; SUDOPLATOV, A.P.; GENDEL', K.K.; SHMYKOV, I.P.

Preparation and order of development in steeply pitching seams
at great depths in the Donets Basin. Trudy Inst.gor.dela 1:
31-46 '54. (MLRA 7:12)
(Donets Basin--Coal mines and mining)

GENDEL', K.K.
BARANOVSKIY, V.I.; SUDOPLATOV, A.P.; SHMYKOV, I.P.; GENDEL', K.K.

Opening steeply pitching coal seams at deep levels in the Donets
Basin. Trudy Inst.gor.dela 3:5-12 '56. (MLBA 9:8)
(Donets Basin--Coal mines and mining)

GENDEL', K.K., inzh.

Coefficient of filling mined-out space in working thin steep
seams with complete backfilling. Nauch. soob. IGD 11:66-75
'61. (MIRA 1634)

(Donets Basin—Mine filling)

GENDEL', K.K.

Effect of the composition of the interlayer rock on the degree
of deformation of undermined steep seams in the central Donets
Basin. Nauch.sob.IGD 14:29-38 '62. (MIRA 16:1)
(Rocks--Testing)
(Donets Basin--Coal mines and mining)

GENDEL', K.K., inzh.

Leaving rocks in mines of the central Donets Basin. Navch.
soob. IGD 18:13-18 '63. (MIRA 16:11)

GRIGOR'YEV, V.I., kand.techn.nauk; GORDON, E.K., kand.techn.nauk

Information report on the conference of the Central Scientific
Technological Council for deep mines. Nizh' 20 no.5:83 My '65.
(MIRA 18:6)

GENDEL, M. S.

Voronin, N. I., Gendel, M. S., and Lesnyak, N. F.
Use OF REFRACTORY LIGHTWEIGHT BRICK FOR LINING A
PERIODIC KILN. Ogneupory 7, 701-704 (1939).

GENDEL, M. S.

Gendel, M. S. and Kulik, A. I. Grogless Refractory Brick
FROM CHASOV-YAR CLAYS. Ogneupory, 7 (10-11) 725-26(1939).-
Grogless refractory brick were prepared by suitable proportioning of
particle size and of moisture. The crude clay (RV clay) was molded,
semidry, in a Riddell press and fired in a Yablonskii furnace at
1320°. The results were satisfactory.

L 19050-65 Ps-4 AFETR/AFTC(b)/AFMDC/AMD/AFWL/SSD

ACCESSION NR: AP5001392

S/0310/64/000/009/0054/0055

AUTHORS: Genin, A. (Candidate of technical sciences); Gendel', S. (Engineer)

TITLE: Application of truck centrifuges for oil cleaning on motor ships B

SOURCE: Rechnoy transport, no. 9, 1964, 54-55

TOPIC TAGS: marine engine, centrifuge, oil, centrifuge separation/ 6 ChRP 25/34
marine engine, Shkoda marine engine, 18D marine engine, DR 30/50 marine engine,
Bukau Vol'f marine engine

ABSTRACT: The application of hydraulically driven truck centrifuges for oil cleaning on motor ships is discussed. The centrifuge works as follows (see Fig. 1 on the Enclosures): oil enters through the centrifuge rotor, passes through tubes (3) and nozzles (4), causing the rotor (2) to turn, and then leaves through the channel (1). Centrifugal forces deposit mechanical impurities on the inside of the rotor. Standard models operate at an inlet pressure of 3-5 kg/cm² at 6000-7000 r.p.m., and process 600-800 liter/hr. The applications of the centrifuge in hydraulic circuits with two-section oil pumps (marine engines Bukau-Vol'f, 6 ChRP 25/34), single-stage oil pumps (marine engines Shkoda, 18D, DR 30/50, auxiliary engines), and autonomous oil pumps, are shown in Figs. 2, 3, and 4

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L 19050-65

ACCESSION NR: AP5001392

respectively (on the Enclosures) and are self-explanatory. Orig. art. has: 4
figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 04

SUB CODE: PR, FP

NO REF SOV: 000

OTHER: 000

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L 19050-65

ACCESSION NR: AP5001392

ENCLOSURE: 01

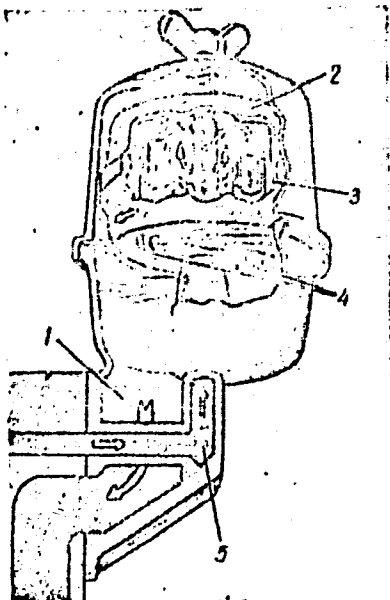


Fig. 1. Operating principle of the hydraulically driven centrifuge.

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L 19050-65

ACCESSION NR: AP5001392

ENCLOSURE: 02

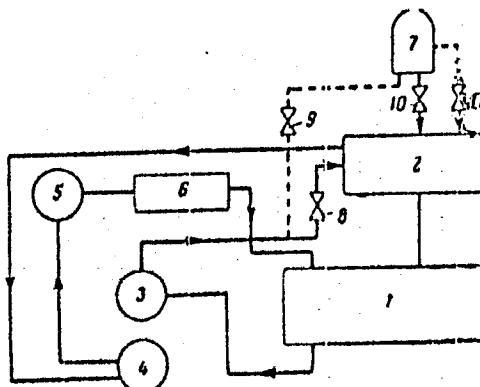


Fig. 2. Connection to a hydraulic circuit with a two-stage oil pump:
 1 - engine; 2 - circulation tank; 3 - bleed-off section and
 4 - delivery section of oil pump; 5 - filter; 6 - oil cooler;
 7 - centrifuge; 8 - throttling, and 9 -, 10 -,
 11 - shutoff valves.

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ACCESSION NR: AP5001392

ENCLOSURE: 03

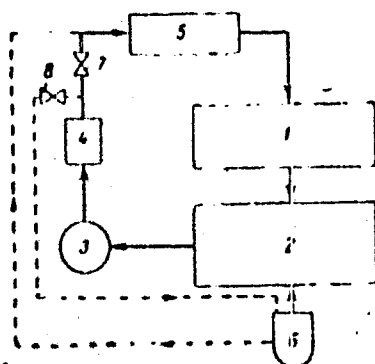


Fig. 3. Connection to a hydraulic circuit with a single-stage oil pump:
 1 - engine; 2 - oil accumulator; 3 - engine oil pump; 4 - filter;
 5 - cooler; 6 - centrifuge; 7 - throttling and 8 - shutoff valves;
 -- existing and --- additional plumbing.

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L 19050-65

ACCESSION NR: AP5001392

ENCLOSURE: C4

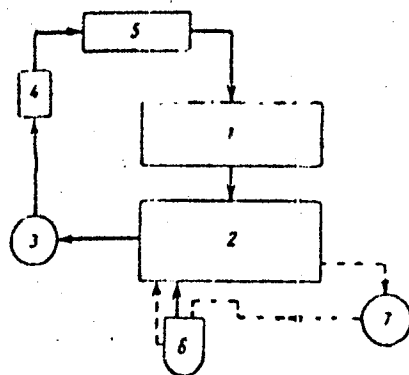


Fig. 4. Connection to a circuit with an autonomous oil pump:
 1 - engine; 2 - accumulator; 3 - engine oil pump;
 4 - filter; 5 - cooler; 6 - centrifuge; 7 - autonomous
 oil pump.

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GENIN, A., kand.tekhn.nauk; GENDEL', S., inzh.

Use of motor-vehicle and tractor centrifuges for oil
purification on motor ships. Rich.transp. 23 no.9:
54-55 8 '64. (MIRA 19:1)

GENIN, A.B., kand. tekhn. nauk; GENDEL', S.G., inzh.

Charts for the connection of separators to the lubricating
system of marine power plants. Trudy LIVT no.72:18-21 '64.
(MIRA 18:10)

GENDEL', Ya., insh.

Let's put all potentialities for increased production in the
service of the seven-year plan. Na stroi. Mosk. 2 no.8:

2-9 Ag '59.

(MIRA 12:12)

(Moscow--Building) (Wages)

GENDEL', Ya. S.

Organization of subordinate planning and economic reckoning in construction.
Gor. khöz. Mosk. No 5:28-32, M_y '52.

GENDEL', Ya. S.

Simplification of interim accounts. Gor. Khoz. Mosk., 26, No 7, 1952.

L 00065-66 EWT(m)/EPA(w)-2/DWA(π)-2 IJP(c)

ACCESSION NR: AP5021324

UR/0120/65/000/004/0026/0029
539.1.076

AUTHOR: Teplyakov, V. A.; Yermakov, S. M.; Makarov, A. I.; Gendel', Yu. G.;
Krasnovskiy, V. I.; Shembel', B. K.

TITLE: The use of accelerating field focusing in the beginning part of a linear
ion accelerator

SOURCE: Pribery i tekhnika eksperimenta, no. 4, 1965, 26-29

TOPIC TAGS: MEV accelerator, ion beam focusing, particle accelerator component

ABSTRACT: The beginning part of an accelerator (b.p.a.) is distinguished by large relative velocity increments within the gaps of the accelerating system. The existing theory of accelerating field focusing is applicable to accelerators with small velocity increments only (1-2%) and describes only poorly the ion motion with the b.p.a.. Such a focusing was tested only on electron models of 4-7 MEV proton linear accelerators and the present authors tested the accelerating field focusing in a b.p.a. with velocity increments of 5-15% and an injection energy of 50 keV with an operative wavelength of 5 m. This article describes the instrument and by comparing the proton spectra at its exit (drift tubes with a channel

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L 00065-66

ACCESSION NR: AP5021324

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having rectangular or circular cross section) shows that the focusing by means of the accelerating field is quite effective. "The authors thank A. P. Fedotov for his participation during the accelerator design, B. K. Kondrat'yev, R. P. Kuybida, and V. I. Moguchev for their part in putting the device into operation, and A. I. Trikin for his help in carrying out the experiments." Orig. art. has: 4 figures. 55

ASSOCIATION: None

SUBMITTED: 27May64

ENCL: 00

SUB CODE: NP

NO REF SOV: 003

OTHER: 000

Card

2/2

AID Nr. 987-10 11 June

MODULE ASSEMBLIES (USSR)

Gendelov, D. L., S. Ya. Kabak, and S. M. Shil'dkret. Priborostroyeniye,
no. 4, Apr 1963, 20-21. S/119/63/000/004/007/010

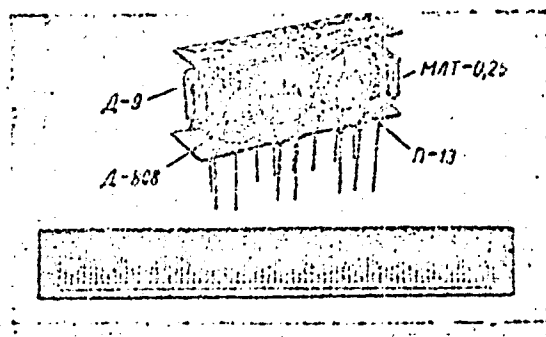


Fig. 1 - Converter-stabilizer module assembly

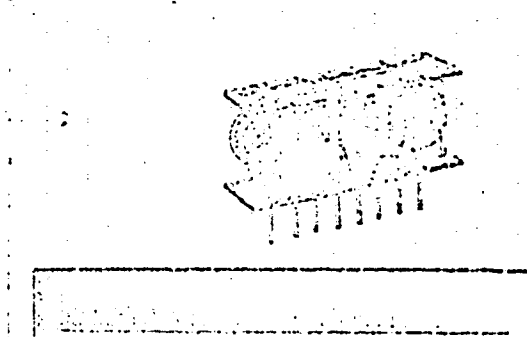


Fig. 2 - Modulator and demodulator module assembly

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AID Nr. 987-10 11 June

MODULE ASSEMBLIES [Cont'd]

S/119/63/000/004/007/010

The utilization of miniature semifinished products for the construction of modular assemblies would result in an increase of assembly compactness from 1.5-2 elements to 4-5 elements per cm^3 . Fig. 1 shows a converter-stabilizer containing two Д-9 diodes, two Д-808 diodes, five П-13 transistors, and eight МЖТ-0.25 resistors. Fig. 2 shows the modular assembly of a modulator and demodulator containing two Д-808 diodes, four П-13 transistors, and three МЖТ-0.25 resistors. Both functional blocks are simple to build and adjust. Each has two printed plates which differ from those of the other in the design of their printed circuits. [DW]

Card 2/2

GRIGOR'YEV, Vasilii Grigor'yevich; GEMDELEV, D.Z. red.; POD'TEL'SKAYA,
K.M., tekhn.red.

[For economy and thrift] Za ekonomiiu i berezhlivost'. Petro-
zavodsk. Gos.isd-vo Karel'skoi ASSR, 1958. 27 p.

(MIRA 12:12)

(Lumbering)

KUDRYAVTSEV, Aleksandr Vasil'yevich; GENDELEV, D.Z. red.; PETROVA,
O.B., tekhn.red.

[The Karelian economic region] Karel'skii ekonomicheskii
raion. Petrozavodsk, Gos.izd-vo Karel'skoi ASSR, 1958. 45 p.
(MIRA 12:11)

1. Predsedatel' Karel'skogo soveta narodnogo khozyaystva (for
Kudryavtsev).
(Karelia--Economic policy)

BALAGUROV, Yakov Alekseyevich.; GEMDELEV, D.Z., red.; POD'YEL'SKAYA,
K.M., tekhn. red.

[Olonets mining and metallurgical enterprises before the revolution]
Olonetskie gornye zavody v doreformennyi period. Petrozavodsk,
Gos. izd-vo Karel'skoi ASSR, 1958. 210 p. (MIRA 11:12)
(Metallurgical plants)

BISKE, G.S., starshiy nauchnyy sotrudnik. Prinimeli uchastiye: LAK, G.TS.,
mladshiy nauchnyy sotrudnik; GORYUNOVA, N.N.. SLODKEVICH, V.S.,
prof., doktor geologo-mineral.nauk, nauchnyy red.; GENDELEV,
D.Z., red.; SHEVCHENKO, L.V., tekhn.red.

[Quaternary sediments and the geomorphology of Karelia]
Chatvertichnye otlozheniia i geomorfologiya Karelii. Petro-
zavodsk, Gos.izd-vo Karel'skoi ASSR, 1959. 307 p. (MIRA 12:12)
(Karelia--Geology)

L 5084-66 EWT(1)/EWT(m)/EWT(w)/T/EWT(t)/EWT(h) IJP(c) JD/JJ/GG

ACC NR: AP5024555

UR/0070/65/010/005/0708/0714

548.8.539.4.015

80

74

E

AUTHOR: Gendelev, S. Sh.; Shcherbak, N. G.

TITLE: Microhardness of crystals of yttrium iron gallium and yttrium iron aluminum garnets

SOURCE: Kristallografiya, v. 10, no. 5, 1965, 708-714

TOPIC TAGS: garnet, yttrium compound, iron compound, aluminum compound, gallium compound, hardness, crystal property

ABSTRACT: A detailed study of microhardness was carried out on crystals of the variable composition $Y_3Fe_{5-x}Ga_xO_{12}$ (YIGG) and $Y_3Fe_{5-y}Al_yO_{12}$ (YIAG) by the indentation method, using a tetrahedral diamond pyramid with a PMT-3 device. The microhardness of garnet crystals was found to be: for $Y_3Fe_5O_{12}$ (YIG), 1230 kg/mm² (7.5 on the 15-point scale); for $Y_3Ga_5O_{12}$ (YGG), 1490 kg/mm² (8.0); for $Y_3Al_5O_{12}$ (YAG), 1730 kg/mm² (8.4). The [110] faces of garnet have a microhardness anisotropy $H_{[100]} > H_{[110]} > H_{[111]}$, characterized by the coefficient $K_{[100]} = H_{[100]}/H_{[111]}$. For YIG, $K_{[110]} = 1.11$. The anisotropy increases as Fe is replaced by Ga and Al. In the [211] plane, $H_{[110]} > H_{[111]}$. The change of microhardness with composition makes it possible to estimate the strength of the interionic bonds and the penetration of ions into certain sites of the crystal lattice. In particular, Ga^{3+} ions have a greater preference for tetrahedral sites than Al^{3+} ions. The average microhardness of the [110] and [211] faces changes linearly as Fe is replaced by Ga and Al. In YAG, the [110] faces, which predominate considerably over [211], are harder than [110]; in YIG and YGG, the [211] faces

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ACC NR: AP5024555

are harder than [110]. "The authors thank A. A. Shvarts^{44, 55} for helpful comments and A. G. Titova^{44, 55} for providing the garnet single crystals." Orig. art. has: 5 figures and 2 tables. 6

ASSOCIATION: None

SUBMITTED: 22Sep64

ENCL: 00

SUB CODE: SS, MM

NO REF SOV: 008

OTHER: 005

Card 2/2 *hed*

SOV/0-3-4-2/26

AUTHORS: Gendelev, S.Sh. and Shafranovskiy, I.I.

TITLE: Edge Forms in the Cubic System (Rebernyye formy kubicheskoy singonii)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 4, pp 405-415 (USSR)

ABSTRACT: The results of the deduction of the edge forms occurring in the cubic system are given. Tables and drawings of all the edge forms appropriate to the group O_h indicating the faces on which they appear are quoted. The numbers of edge forms for all five of the cubic groups are indicated. The various possible combinations of pairs of forms are first listed - essentially combinations of two of the forms: 100, 110, 111, $hk0$, hhl , hkk , hkl ; but including some pairs such as hkl ; hkl and 100: 001. In all, there are 32. The possibilities for the holohedric class O_h are drawn out, a clinographic drawing and a projection being given for each of the 38 combinations. A table indexes these. A specimen of one combination (100: hkl) is shown in the different symmetries appropriate to the 5 cubic

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Edge Forms in the Cubic System

SOV/70-3-4-2/26

classes. For the class O_h there are 38 forms, for O 29, for T_d 35, for T_h 30 and for T 29, making a total of 161.

There are 3 figures, 4 tables and 10 references, 9 of which are Soviet and 1 German.

ASSOCIATION: Leningradskiy gornyy institut (Leningrad Mining Institute)

SUBMITTED: May 12, 1958

Card 2/2

SHAFRANOVSKIY, I.N.; OBNDELEV, S.Sh.

Peak, edge, and face forms of crystals. Min.sbor. no.12:
43-56 '58. (MIRA 13:2)

1. Gorny institut imeni G.V.Plekhanova, Leningrad.
(Crystallography)

AUTHOR: Gendelev, S. Sh.

SOV/70-4-3-27/32

TITLE: The Application of the MII-4 Interference Microscope to the Study of Crystal Surfaces

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 3, pp 429-431 (USSR)

ABSTRACT: Interference examinations of the surface topography of crystals by Lemmleyn, Tolanskiy and others have required the silvering of the crystal surfaces which, in the case of soluble materials is technically difficult. The Linnik MII-4 interference microscope, which does not need silvered surfaces, has been used for studying the cross-hatching growth patterns occurring under certain growth conditions. Reflected light is used and either metallic surfaces or mineral crystals with poorly-reflecting surfaces can be studied. The field of view shows both the object and the interference pattern from the relief. The pattern from a pyrites crystal is reproduced and shows parallel steps; large ones of height 0.3μ and smaller ones of $0.07 - 0.08 \mu$. The accuracy is about 0.03μ . A device by which any required face of the crystal can be presented for examination to the objective, which points

Card1/2

SOV/70-4-3-27/32
The Application of the MII-4 Interference Microscope to the Study
of Crystal Surfaces

upwards through a hole in the horizontal stage, is described.
There are 3 figures and 6 references, of which 5 are Soviet
and 1 English.

ASSOCIATION: Leningradskiy gornyy institut im. G.V. Plekhanova
(Leningrad Mining Institute imeni G.V. Plekhanov)

SUBMITTED: November 27, 1958

Card 2/2

GENDELEV, S.Sh.

Striations on crystals and their minerogenetic significance.
Zap. Vses. min. ob-va 88 no.5:512-520 '59. (MIRA 13:2)
(Crystals)

GENDELEV, S. Sh, Cand Geol-Mineral Sci -- (diss) "Shading of Growth on
Crystals and Its Crystallogenic Importance," Leningrad, 1960, 20 pp,
150 copies (Leningrad State U. im A. A. Zhdanov) (KL, 47/60, 99)

SHAFRANOVSKIY, I.I., prof. Primeneniye uchastiye: MOKIYEVSKIY, V.A.; STULOV, N.N.; GENDELEV, S.Sh.; PIS'MENNYI, V.A.; BALASHOVA, M.N.; MIKHAYEVA, I.V.; SAL'DAU, B.P.; KALININ, A.I.; DOLIVO-DOBROVOL'SKAYA, G.M. PIOTROVSKIY, G.L., dotsent, otv.red.; FURMAN, K.P., red.; MALYAVKO, A.V., tekhred.

[Lectures on the morphology of mineral crystals] Lektsii po kristal-lomorfologii mineralov. L'vov, Izd-vo L'vovskogo univ., 1960.
161 p. (MIRA 14:1)

1. Kafedra kristallografii Leningradskogo gornogo instituta (for Mokiyevaliy, Stulov, Gendeleu, Pis'mennyy, Belashova, Mikhayeva, Sal'dau, Kalinin, Dolivo-Dobrovol'skaya).
(Minerals) (Crystals)

GENDELEV, S.Sh.

Morphologic classification of the striation of growth on crystals.
Zap.Vses.min.ob-va 90 no.6:629-636 '61. (MIRA 15:2)
(Crystals--Growth)

GENDELEV, S.Sh.

Simple edge forms of the cubic system. Zap. LGI 38 no.2:150-181
'61. (MIRA 15:1)
(Crystallography)

MIKHEYEV, V.I. [deceased]; SHAFRANOV, I.I.; GENDELEV, S.Sh.

Crystal edge forms. Report No.3: Simple edge forms of trigonal
and hexagonal systems. Zap. LGI 38 no.2:122-139 '61.
(MIRA 15:1)

(Crystallography)

GENDELEV, S.Sh.; LAPOVOK, B.L.; ROBINSHTEYN, B.Ye.

Nickel ferrite single crystals with a narrow ferromagnetic resonance line. Fiz. tver. tela 5 no.10:3037-3038 0 '63. (MIRA 16:11)

L 12794-63

EMP(q)/EWT(m)/BDS AFFTC/ASD JD/JG

ACCESSION NR: AP3000777

S/0070/63/008/003/0431/0436

AUTHOR: Gendelev, S. Sh.

TITLE: Face morphology of crystals of yttrium-iron garnet

SOURCE: Kristallografiya, v. 8, no. 3, 1963, 431-436

TOPIC TAGS: garnet, crystal morphology, Y, Fe, crystal growth

ABSTRACT: The face morphology of yttrium-iron garnet crystals is examined as a function of internal structure and of a number of external conditions existing during crystallization. Among the latter, an important factor is the quantitative relations between Y sup 3+ and Fe sup 3+ cations in the crystallization zone of the melt. Melts rich in Y sub 2 O sub 3 show faster growth rates on the (211) face, but a dominance of the (110) face, whereas melts rich in Fe sub 2 O sub 3 show faster growth on the (110) face, but dominance of the (211) face. Other conditions being equal, growth of (110) proves to be more homogeneous than (211). Increased development of the (110) form and diminished growth of (211) are generally favorable indications of higher-quality monocrystals. The author concludes that improved quality of crystals and more rapid growth are to a great degree dependent on the use of solvents that will permit the solution of greater quantities of Y

Card 1/p1

GENDELEV, S.Sh.

Distortions of crystals grown by Verneull's method.
Kristallografiia 8 no.6:913-916 N-D'63.

(MIRA 17:2)

GENDELEV, S.Sh.

Shape of strained ferrite crystals of spinal structure.
Dokl. AN SSSR 153 no.3:679-680 N '63. (MIRA 17:1)

1. Predstavleno akademikom N.V. Belovym.

DROKIN, A.I.; SUDAKOV, N.I.; GENDELEV, S.Sh.; IZOTOVA, T.P.; RYABINKINA, L.I.

Temperature dependence of the first anisotropy constant in
single crystals of iron-nickel ferrites. Fiz. met. i
metalloved. 17 no.5:684-688 My '64. (MIRA 17:9)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR.

ACCESSION NR: AT4040559

8/2564/64/004/000/0129/0137

AUTHOR: Gendelev, S. Sh.; Yur'yeva, Ye. K.

TITLE: Oxidation of ferrite crystals with a spinel structure during their growth by the Verneuil method

SOURCE: AN SSSR. Institut kristallografi. Rost kristallov, v. 4, 1964, 129-137

TOPIC TAGS: hematite, ferrite, spinel, Verneuil method, crystal growth, ferrite oxidation, crystallography, magnesium ferrite, magnesium aluminate, crystal structure

ABSTRACT: In a study of hematite formation, 30-35 mm long, 4-5 mm in diameter, cylindrical and conical magnesium ferrite-aluminate crystals, grown in a Verneuil apparatus at a rate of 2 mm/hr., were examined in reflected light with a metallographic MIM-8M microscope. Longitudinal crystal cross sections showed that hematite concentrates in octahedral planes of the vertical belt, and in each plane the hematite plates are predominantly parallel to the edge adjacent to the octahedron face in which $\alpha\text{-Fe}_2\text{O}_3$ is most developed. Prolonged etching with 1:5 HCl gradually dissolved the hematite, without revealing the grain boundaries. Observations in polarized light also confirmed the monocrystalline structure of

Card 1/2

ACCESSION NR: AT4040559

hematite formations and demonstrated their oriented growth into ferrite crystals. Oxidation of the ferrite crystals and their solid solutions was found to entail a gradual change in the lattice parameter of the crystal. "The authors thank E. D. Gutorova and N. G. Shcherbak for assistance in the work." Orig. art. has: 8 figures and 1 table.

ASSOCIATION: Institut kristallografi AN SSSR (Institute of Crystallography, AN SSSR)

SUBMITTED: 00

DATE ACQ: 02Jul64

ENCL: 00

SUB CODE: SS, OP

NO REF SOV: 010

OTHER: 011

Card 2/2

L 11883-66 EWT(1)/T IJP(c) GG

ACC NR: AT6002247

SOURCE CODE: UR/2584/65/008/000/0173/0180

AUTHOR: Gendelev, S. Sh.

ORG: none

TITLE: Growing of ferrite crystals in the NiO-Fe₂O₃ system by the Verneuil method

SOURCE: AN SSSR. Institut kristallografi. Rost kristallov, v. 6, 1965, 173-180

TOPIC TAGS: ferrite, crystal growing, iron oxide, nickel compound

ABSTRACT: At Fe₂O₃: NiO ratios below 1.2, crystals of iron-nickel ferrite were grown in the presence of a moderate vertical temperature gradient. Large gradients cause the formation of point inclusions of (Ni, Fe) O which separate on polishing of the crystal. Growing in the range of Fe₂O₃: NiO = 1.2 to 2.1 yields fairly large crystals without inclusions. When the Fe₂O₃: NiO ratio is 1.5 - 1.7, the synthesis is possible over a wide range of conditions which permit the preparation of crystals with different magnetite contents and different physical properties from mixtures of the same composition. At Fe₂O₃: NiO ratios above 2.1, the ferrite decomposes, forming hematite plates. The critical excess of Fe₂O₃ depends on the crystallization conditions. A high crystallization rate and efficient removal of heat make it possible to obtain practically single-phase crystals up to Fe₂O₃: NiO = 2.1. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 20// SUBM DATE: none / ORIG REF: 005 / OTH REF: 007

Card 1/1

L 6461-66 EWT(m)/EWP(t)/EWP(z)/EWP(b) IJP(c) JD/HW

ACCESSION NR: AP5019849

UR/0181/65/007/008/2362/2366

AUTHOR: Sudakov, N. I.; Gendelev, S. Sh.; Drokin, A. I.

TITLE: Measurement of rotational hysteresis loss in nickel cobalt ferrite single crystals resulting from heat treatment and magnetic annealing

SOURCE: Fizika tverdogo tela, v. 7, no. 8, 1965, 2362-2366

TOPIC TAGS: magnetic hysteresis, magnetic domain structure, magnetic domain boundary, ferrite, nickel containing alloy, cobalt containing alloy

ABSTRACT: This is a continuation of earlier work by the authors (FMM v. 13, 788, 1962; FTT v. 4, 2293, 1962; Izv. vuzov fizika no. 2, 141, 1963 and elsewhere), where it was shown that the rotational hysteresis losses increase with increasing magnetic field in spite of the theoretical predictions, owing to the radical re-alignment of the domain structure. The present article reports the first results on nickel-cobalt ferrites $\text{Ni}_{0.71}\text{Co}_{0.03}\text{Fe}_{0.20}^{2+}\text{Fe}_{0.04}^{3+}\text{O}_4$ grown by the Verneuil method. The uniform magnetic field (up to 30 kOe) was rotated in a plane parallel to the (100) surface of the crystal. The test procedure is briefly described. Prolonged annealing at 300C and subsequent slow cooling leads to a decrease of the loss in weak and medium fields at room temperature and to an increase of the loss at higher temperatures. This is attributed to redistribution of the ions as a result of

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L 6461-66

ACCESSION NR: AP5019849

6

electron exchange under the influence of the domain-boundary fields. This results in formation of potential barriers that prevent the realignment of the domain structure in the rotating magnetic fields, thus reducing the losses at low room temperatures. The potential wells disappear with increasing temperature and the losses increase. Magnetic annealing superimposes uniaxial anisotropy on the ordinary crystallographic anisotropy, thus contributing to realignment of the domain structure and to an increase in the loss. The presence of electron diffusion is confirmed by the perminvar effect of the partial hysteresis loop during slow cooling of the sample. The causes of the losses to rotational hysteresis in strong fields are still difficult to explain. Orig. art. has: 3 figures.

ASSOCIATION: Institut tsvetnykh metallov im. M. I. Kalinina (Institute of Non-ferrous Metals); Institut fiziki SO AN SSSR, Krasnoyarsk (Institute of Physics, SO AN SSSR)^{44,55}

SUBMITTED: 17Nov64

ENCL: 00

SUB CODE: SS, EM

NR REF SOV: 019

OTHER: 005

nw

Card 2/2

DROKIN, A.I.; GENDELEV, S.Sh.

Domain structure in single crystals of barium and strontium hexaferrite. Izv. vys. ucheb. zav.; fiz. 8 no.2:40-42 '65. (MIRA 18:7)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR.

L 33176-65 EWF(1)/ENT(m)/T/ENP(b)/ENP(t) Pad IJP(c) JD/HW
 ACCESSION NR: AP6005240 S/0057/65/035/002/0345/0347

AUTHOR: Salanskiy, N.M.; Drokin, A.I.; Smolin, R.P.; Gordelev, S.Sh.

TITLE: Barkhausen effect in a single-crystal nickel-cobalt ferrite

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.2, 1965, 345-347

TOPIC TAGS: Barkhausen effect, ²¹single crystal, ferrite, nickel, cobalt, tempera-
 ture dependence ₁₆

ABSTRACT: The Barkhausen effect was investigated in a single-crystal cobalt-doped nickel ferrite containing 2% CoO. The crystal was grown in an oxyhydrogen flame by the Verneuil method, and from it a 11 x 0.6 x 1.5 mm bar was cut with the large surface in the (100) plane and the long axis in the [001] direction. The resistivity of this crystal was only 0.05 ohm cm; it is suggested that this low resistivity may be due to an appreciable concentration of Fe²⁺. The number of Barkhausen jumps of duration greater than 100 nanosec was counted as the magnetizing field was swept from -86 to +66 Oe during the course of 1000 sec at temperatures from 300 to 77°K. The integral number of jumps increased almost linearly with the magnetizing field, and at room temperature the total number of jumps counted during

Cord1/2

L 33175-65

ACCESSION NR: AP5005240

the magnetization reversal was about 3×10^5 . The number of Barkhausen jumps per magnetization reversal remained constant with decreasing temperature until a temperature of 180°K was reached; thereafter the number of jumps decreased rapidly and no jumps were detected at temperatures below 120°K , even when the magnetizing field was increased to 280 Oe. Hysteresis curves taken at 50 cps showed increasing loss with decreasing temperature in spite of the disappearance of the Barkhausen jumps. It is suggested that Barkhausen jumps may actually have occurred at the low temperatures but with amplitudes and durations such that they could not be recorded with the apparatus employed, and that this effect may be useful in the construction of low-noise amplifiers. A polycrystalline ferrite of the same composition (but with a resistivity of 10^{10} ohm cm) showed an increasing number of Barkhausen jumps with decreasing temperature. Orig.art.has: 3 figures.

ASSOCIATION: Institut fiziki SO AN SSSR, Krasnoyarsk (Institute of Physics, SO AN SSSR)

SUBMITTED: 06Apr64

ENCL: 00

SUB CODE:SS,EC

NR REF SOV: 003

OTHER: 003

Card 2/2

L 26668-66 EWT(1)/EWT(m)/EWA(d)/T/EWP(t) IJP(c) JD/HW/AT

ACC NR: AP6010409

SOURCE CODE: UR/0126/66/021/003/0423/0429

AUTHORS: Drokin, A. I.; Sudakov, N. I.; Gendelev, S. Sh.; Ryabinkina, L. I.

ORG: Institute for Physics, SO AN SSSR (Institut fiziki SO AN SSSR)

TITLE: Influence of ion diffusion during thermal and thermomagnetic treatment on the magnetocrystallographic anisotropy in single crystals of nickel-cobalt ferrites

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 3, 1966, 423-429

TOPIC TAGS: ferrite, magnetic crystal, magnetic anisotropy, nickel compound, cobalt compound, crystal anisotropy, temperature dependence, electric conductivity, magnetic field, thermomagnetic effect, single crystal

ABSTRACT: The effect of long-term, low-temperature annealing on the temperature dependence of the first magnetocrystallographic anisotropy constant and on electrical conductivity of single crystals of nickel-cobalt ferrites was determined. The effect of cooling the specimen in a magnetic field of 15 000 oerstedes on the magnetic anisotropy in the latter was also studied. The experiments were carried out over the temperature interval of -200 to 300C, and the results are presented graphically (see Fig. 1). It was found that the temperature dependence of K_1 , the first magnetocrystallographic constant, obeyed the relationship

$$K_1 = K_0 e^{-\alpha T}$$

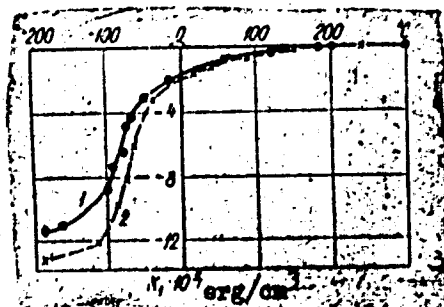
UDC: 538.245

Card 1/2

L 26668-66

ACC NR: AP6010409

Fig. 1. Temperature dependence of the first anisotropy constant of a nickel-cobalt ferrite: 1 - prior to annealing; 2 - after a 48-hour annealing period at 3000.



proposed by N. L. Bryukhatov and L. V. Kirenskiy (ZhETF, 1938, 8, 198), where K_1 is the first magnetocrystallographic constant, K_0 - its value at 0K, α - a constant, and T - the absolute temperature. It was also found that annealing increases the absolute magnitude of the anisotropy constant and electrical resistance and that thermomagnetic treatment induces axial anisotropy. It is concluded that the observed effects are due to migration of ions in the ionic lattice. Orig. art. has: 6 graphs and 5 equations.

SUB CODE: 20/ SUBM DATE: 16Nov64/ ORIG REF: C06/ OTH REF: 009

Card 2/2

BLG

1 17330-66 EWT(m)/T/EWP(t)/LT1... IJP(c) NW/JD/JH

ACC NR AR6025745

SOURCE CODE: UF/0058/66/000/004/A071/A071

AUTHOR: Zayonchkovskiy, Ya. A.; Gendelev, S. Sh.; Lyukshin, V. V.

TITLE: Epitaxial formation of single crystal films of ferrites by the chemical transport reaction method

SOURCE: Ref. zh. Fizika, Abs. 4A597

REF SOURCE: Sb. Simpozium. Protsessy sinteza i rosta kristallov i plenok poluprovodnik. materialov, 1965. Tezisy dokl. Novosibirsk, 1965, 11-12

TOPIC TAGS: epitaxial growing, single crystal growing, ferrite, magnetic thin film, transport phenomenon, surface property, crystallization, magnetic coercive force

ABSTRACT: The method of chemical transport reactions was used to grow single-crystal films of Ni, Mg, Co, and Mn ferrites with spinel structure. The substrates were either single crystals of MgO freshly cleaved along (100), or in individual cases natural (111) surfaces of MgAl₂O₄. The epitaxial growing of the ferrite film was effected in vacuum, using dry hydrogen chloride at 900-1000°C as the chemical agent. A morphological study shows that the films, depending on the composition, are made up of flat discs, rounded-off hills, or faced pyramids separated by grooves. The dimensions and singularities of the structure of the sculpture elements depend on the crystallization regime. Under strong transport conditions, these elements have a skeleton structure; octahedra with negative edges are developed. The growth of the entire film occurs simultaneously from many centers on dislocations inherited from

Card 1/2

L 47236-66

ACC NR: AR6025745

the substrate. Goniometric measurements of the films demonstrate development of the (100), (111), and (110) planes, and more rarely (311). The spinel structure of the grown films was confirmed by x-ray diffraction and the lattice periods are determined. Magnetic measurements have shown that films of Mn-ferrites are characterized by a small coercive force ($A_c = 1 - 2$ Oe). This quantity amounts to several tens of Oe in Mg- and Ni-ferrites and to hundreds of Oe in Co-ferrites. [Translation of abstract]

SUB CODE: 20

Card 2/2 pb

EW(m)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AT6002239

SOURCE CODE: UR/2564/65/006/000/0098/0104

AUTHOR: Gendelev, S. Sh.; Titova, A. G.

ORG: none

TITLE: Peculiarities of growth of yttrium aluminum garnet crystals

SOURCE: AN SSSR. Institut kristallografii. Rost kristallov, v. 6, 1965, 98-104

TOPIC TAGS: garnet, yttrium compound, crystal growing, crystal growth, crystallization, nucleation, nonmetallic inclusion

ABSTRACT: Yttrium-aluminum garnet, $Y_3Al_5O_{12}$ crystals, isomorphous with yttrium-iron garnet, $Y_3Fe_5O_{12}$ crystals, were grown from $PbO-PbF_2$ fluxed melt to study morphology of these technically important crystals. The growth process was briefly described. The $Y_3Al_5O_{12}$ single crystals were preferentially formed by $\{110\}$ planes but some also by $\{211\}$ planes. The predominant morphological role of the $\{110\}$ faces in $Y_3Al_5O_{12}$, in contrast with $Y_3Fe_5O_{12}$ crystals, was due to the absence of a deficiency of Y^{3+} ions in relation to Al^{3+} ions. The single crystals up to 2cm in size were obtained. Smaller crystals were homogeneous, but larger ones contained multiphase inclusions. The inclusions were studied micrographically. This study made it possible to detect three basic consecutive crystallization phases: a normal nucleation, a prolonged dendritic growth, and the final growth of plane surfaces. The source of inclusions in a transparent crystal was crystallization of the impoverished melt entrapped between the layers growing in opposition to each other in the dendritic growth phase. The formation of various defective forms on $\{110\}$ and $\{211\}$ crystal faces was discussed in terms of growth conditions. Orig. art. has: 6 figures.

SUB CODE: / SUBM DATE: none / ORIG REF: 015 / OTH REF: 006

Card 1/1 EV

1000: 456036985
 Dronin, A. I.; Sudakov, N. I.; Gendelev, S. Sh.; Yanitskiy, V. K.
 Institute of Physics, SO AN SSSR, Krasnoyarsk (Institut fiziki SO AN SSSR)
 Influence of heat treatment on the magnetic-crystallographic anisotropy and
 hysteresis loss in lithium pentaferrite single crystals
 Zhurnal tverdogo tela, v. 8, no. 11, 1966, 3363-3365
 have investigated the influence of heat treatment on the tem-
 perature dependence of the magnetic anisotropy constant and the field dependence of rotation
 hysteresis loss in lithium pentaferrite single crystals
 having a composition $6Li_2FeO_3 \cdot 3Fe_2O_3 \cdot 60FeO$,
 constant was determined by torque mea-
 surements during the reversal
 of magnetization in air from 800C

TOPIC
dependent
ABSTRACT:
perature dependence
hysteresis losses
by others. In addition
anisotropy constants
grown by the method described
ser. III, no. 9, 21, 1964,
resulting in a crystal having
spherical sample. The magnetization
ments in fields of 20 000 Oe.
between the torque curves plotted
magnetization cycle. The results are

Card 1/2

NR: AF6036985

(A,N)

SOURCE CODE: UR/0181/66/008/011/3363/3365

AUTHOR: Drokin, A. I.; Sudakov, N. I.; Gendelev, S. Sh.; Yanitskiy, V. K.

ORG: Institute of Physics, SO AN SSSR, Krasnoyarsk (Institut fiziki SO AN SSSR)

TITLE: Influence of heat treatment on the magnetic-crystallographic anisotropy and rotation-hysteresis loss in lithium pentaferriite single crystals

SOURCE: Fizika tverdogo tela, v. 8, no. 11, 1966, 3363-3365

TOPIC TAGS: lithium compound, magnetic anisotropy, magnetic hysteresis, temperature dependence, annealing

ABSTRACT: The authors have investigated the influence of heat treatment on the temperature dependence of the anisotropic constant and the field dependence of rotation-hysteresis losses in a temperature range much larger than in earlier investigations by others. In addition they investigated the temperature dependence of the magnetic-anisotropy constants in a wider range of temperatures. The single crystals were grown by the method described by V. N. Seleznev et al. (Voprosy radioelektroniki, ser. III, no. 9, 27, 1962) from a charge having a composition $6\text{Li}_2\text{CO}_3 \cdot 34\text{Fe}_2\text{O}_3 \cdot 60\text{PbO}$, resulting in a crystal having the formula $\text{Li}_{0.48}\text{Fe}_{2.25}\text{O}_4$. The tests were made on a spherical sample. The magnetic-anisotropy constant was determined by torque measurements in fields of 20 000 Oe. The hysteresis losses were calculated from the area between the torque curves plotted in both field directions during the reversal of magnetization cycle. The results have shown that quenching in air from 800C in

Card 1/2

ACC NR: AP6036985

the hysteresis loss and decreases the values of the anisotropy constant, the decrease of the latter being the larger the lower the measurement temperature. The hysteresis loss exhibits a maximum in the region 5000 - 7000 Oe, depending on the quenching temperature. It is shown that the changes in the anisotropy and hysteresis are due to disordering of the ions of high temperatures and freezing of this disorder upon quenching. Prolonged annealing and magnetic annealing did not exert any noticeable influence on the obtained relations. The temperature variation of the anisotropy constant satisfies the Bryukhatov-Kirenskiy empirical formula (it is proportional to $\exp(-\alpha T^2)$, where α is a constant). Orig. art. has: 2 figures.

SUB CODE: 20/

SUBM DATE: 17Jan66/

ORIG REF: 005/

OTM REF: 006

Card 2/2

~~CHENDELVA~~, M.A., podpolkovnik meditsinskoy sluzhby; HERLINER, G.B.,
kapitan meditsinskoy sluzhby

Clinical aspects of gasoline pneumonia. Voen.med.zhur.no.12:71
D '56. (MLRA 10:3)

(PNEUMONIA) (GASOLINE--TOXICOLOGY)

GENDELEVA, M.A., podpolkovnik med.sluzhby; KOVAL', Yu.F., kapitan med.sluzhby

Clinical aspects and course of acute pneumonia. Voen.-med.zhur.
no.12:26-29 D '58.

(MIRA 12:12)

(PNEUMONIA,

clin. aspects & course (Rus))

GENDELEVA, M.A.; BERLINER, G.B.

Electrocardiogram in severe anemia. Klin.med. 38 no.7:155 '60.
(MIRA 13:12)

(ANEMIA)

(ELECTROCARDIOGRAPHY)

GENDELEVA, M.A.; BERLINER, G.B.

Remission in a case of severe chronic lymphatic leukemia. Klin.
med. 39 no.1:147-148 Ja '61. (MIRA 14:1)
(LEUKEMIA)

GENDELEVICH, I. S.

28(1):25(1) PHASE I BOOK EXPLOITATION 30/2631

Mechanization i avtomatizatsiya trudovymkh professov v liternom proizvodstve (Mechanization and Automation of Labor-consuming Processes in Foundry Practice) Moscow, Mashiz, 1959. 226 p. 5000 copies printed.

Reviewers: E. M. Stobnikov, Candidate of Technical Sciences; M. (title page); G. I. Kobylitskiy (Moscow); Ed. (Inside back cover); M. I. Sokolov, Candidate of Technical Sciences; Tech. M. I. O. V. (Moscow); Mashiz, Mashiz, 1959. 226 p. 5000 copies printed. Technology of Machinery Manufacturing (Machinery Division, Mashiz); E. P. Smirnov, Engineer.

PURPOSE: The book is intended for technical personnel in foundries and engineers engaged in the mechanization and automation of industrial processes. It may also be used by students of institutions of higher technical education.

COVERAGE: The book deals with recent achievements in the mechanization and automation of time-and labor-consuming operations in foundries. Specific instances of mechanization and automation of foundry processes are described. The material presented in this book is divided into six parts, dealing with the following subjects: solidification of castings; mold and coremaking; casting methods; each part consists of a number of technical papers presented by several authors. The application of mechanization and streamlining of specialized casting methods, investment casting and the use of shell molds. There are numerous diagrams showing automated and mechanized installations in foundries. Most of the material is based on experiments and work done at the "Tramway Alloy" Plant. Some of the methods described apply to the experimental stage at that plant. The technical papers published in this book were originally presented at a technical conference of the Soviet machine industry in October 1957. No personalities are mentioned.

Kril'shteyn, L. N. Production of Sand Molds by Hydraulic Pressing 78

Risolev, V. A. Mold Making With a Sand Slinger in Steel Foundries 79

Vysokova, A. I. Transport and Distribution of Rapid-drying Waterglass Compounds to Tanks 33

Salimov, P. I. Mechanization of Shell-mold Casting 212

Smirnov, G. M. Use of High-frequency Electric Heating for Molding Shell Mold Molds 216

Yakovlev, V. I. Overall Automation of Mixing Systems in Foundry Shops 40

Zaytsev, I. B., A. N. Gvozdevich, and I. S. Gendelevich. Mechanization of Casting and Extrusion Operations to Remove Cores 97

Green, E. A. and E. A. Bikhromskiy. Quick-change Equipment for Coremaking on Vibrating Molding Machines in Small-lot Production 101

Krilyanets, L. N. Mechanization of Mold Transfer from Assembly Line to Conveyor Belt 104

Malchenko, G. I. Automated Lines for Molding and Shakeout in Foundry Shops 47

Poruchikov, Yu. B. Some Problems in the Automation of Charge Compelling and Turbine Charging 106

GENDELEVICH, S.I.; ZHIVOTOVSKAYA, L.A.; POPPE, K.K.

Letters to the editor. Zhur.nevr.i psikh. 60 no.9:1240-1242 '60.
(SCHIZOPHRENIA) (MIRA 14:1)

GENDEL'MAN, A.M.

Erosion development and control in the southern steppe of the
Ukrainian S.S.R. [with summary in English]. Pochvovedenie no.8:
69-77 Ag '58. (MIRA 11:9)

1.Sel'skokhozyaystvennyy institut, Odessa.
(Ukraine--Erosion)

YEGOROVA, Tat'yana Mikhaylovna; KANIVETS, M.A., retsenzent; RYZHYKH, I.I., starshago prepod., retsenzent; STEPANOV, S.P., assistant, retsenzent; GENDEL'MAN, M.A., prof., retsenzent; GENDEL'MAN, A.M., kand. ekon. nauk, retsenzent; KUROPATENKO, F.K., prof., retsenzent; KONTOROVICH, I.A., starshiy prep., retsenzent; YEROFEYENKO, A.G., assisten, retsenzent; DAVYDOV, G.P., red.; SHAMAROVA, T.A., red. izd-va; SUNGUROV, V.S., tekhn. red.

[Topographical drawing] Topograficheskoe cherenie. Moskva, Geodezizdat, 1961. 158 p. (MIRA 15:8)

1. Zaveduyushchiy kafedroy geodezii Omskogo sel'skokhozyaystvennogo instituta (for Kanivets).
2. Zaveduyushchky kafedroy zamleustroystva TSelinogradskogo sel'skokhozyaystvennogo instituta (for Gendel'man, M.A.).
3. Zaveduyushchiy kafedroy zemleproyektirovaniya i planirovki sel'skikh zaselennykh mest Belorusskoy sel'skokhozyaystvennoy akademii (for Kuropatenko). (Topographical drawing)

RENDER MAY, B. R.

1983. MOTOR-GENERATOR SETS WITHOUT FLYWHEEL FOR
THE MAIN DRIVE OF REVERSIBLE ROLLING MILLS.

B.R. Gendelman,
Elektrichestvo, 1957, No. 12, 8-13. In Russian.

Reasons against the use of flywheels in modern plants are indicated. For the auxiliary drives, induction motors are now widely used; for the main drive of the mill the use of d.c. motors, fed from a synchronous motor-driven converting set without flywheel, are recommended. A grapho-analytical calculation permits the determination of the out-of-phase angle of the synchronous motor rotor corresponding to the variable values of load given in a graph. Two cases of automatic regulation are considered: constant excitation of driving motor, or constant reactive power. Results of practical tests, illustrated by oscillograms, prove the correct working of the plant, even when the set is connected to a supply of limited capacity. Comparative tests between a set with asynchronous motor and flywheel and a set without flywheel driven by a synchronous motor both supplying the same rolling mill practically demonstrate the advantages of the latter set.

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